

PROFESSIONAL SERVICES

MULTIPLE CONSULTANT CONTRACT WORK ORDERS OVER \$50K

- 18. Approve Work Order #19 – Lake Howell Road / Design under contract PS-5165-04/AJR – Master Agreement for Continuing Professional Services for Public Works Minor Construction Projects under \$1M – to Keith and Schnars, PA of Altamonte Springs (\$59,999.09)**

Work Order #19 will provide engineering services for the design, permitting, and preparation of construction plans for proposed drainage improvements to Lake Howell Road. The project covers the retrofit of an existing retention pond and will alleviate existing road flooding along the north end of Lake Howell Road. The preliminary cost estimate for construction is \$200,000.00.

The six firms on contract PS-5165-04/AJR (WBQ, PEC, Inwood, Keith & Schnars, Metric and HDR) were contacted for proposals with Keith & Schnars and Metric responding. The Public Works evaluation team, consisting of Roland Raymundo, PE.; Bob Walter, PE; and Ed Torres, PE; evaluated the proposals and selected Keith & Schnars based on the following evaluation criteria: Technical Issues & Approach, Completeness of Proposal, and Adequate Resources Proposed. The work order will run until one year after completion of the construction. The amount of the work order is \$59,999.09.

Funds are available in account number 077641.560680, CIP 2091-03. Public Works/Roads-Stormwater Division and Fiscal Services/Purchasing and Contracts Division recommend that the Board approve and authorize the County Manager to execute the Work Order.

**Board of County Commissioners
SEMINOLE COUNTY, FLORIDA**

WORK ORDER

Work Order Number: 19

Master Agreement No.: **PS-5165-04/AJR**
Contract Title: **Master Agreement for Continuing Professional Services**
Project Title: **Lake Howell Road/Design**

Dated: November 11, 2004

Consultant: KEITH AND SCHNARS
Address: 385 CENTER POINTE CIRCLE SUITE 1303
ALTAMONTE SPRINGS, FL 32701

ATTACHMENTS TO THIS WORK ORDER:

- ☐ drawings/plans/specifications
☒ scope of services
☐ special conditions
☐

METHOD OF COMPENSATION:

- ☒ fixed fee basis
☐ time basis-not-to-exceed
☐ time basis-limitation of funds

TIME FOR COMPLETION: The services to be provided by the CONTRACTOR shall commence upon execution of this Agreement by the parties and shall be completed within One (1) year after completion of construction. Failure to meet the completion date may be grounds for Termination for Default.

Work Order Amount: Fifty Nine Thousand Nine Hundred Ninety Nine and 09/100 DOLLARS (\$ 59,999.09)

IN WITNESS WHEREOF, the parties hereto have made and executed this Work Order on this _____ day of _____, 20____, for the purposes stated herein.

(THIS SECTION TO BE COMPLETED BY THE COUNTY)

Keith and Schnars, P.A.

ATTEST:

_____, Secretary
(CORPORATE SEAL)

By: _____
Mark J. Moshier, Vice-President
Date: _____

BOARD OF COUNTY COMMISSIONERS
SEMINOLE COUNTY, FLORIDA

WITNESSES:

(Contracts Analyst, print name)

By: _____
J. Kevin Grace, County Manager

Date: _____

(Contracts Analyst, print name) OP #13007

As authorized for execution by the Board of
County Commissioners at their _____,
20____ regular meeting.

WORK ORDER TERMS AND CONDITIONS

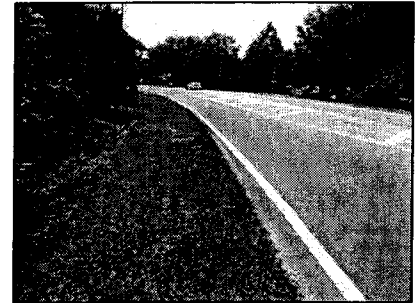
- a) Execution of this Work Order by the COUNTY shall serve as authorization for the CONSULTANT to provide, for the stated project, professional services as set out in the Scope of Services attached as Exhibit "A" to the Master Agreement cited on the face of this Work Order and as further delineated in the attachments listed on this Work Order.
- b) Term: This work order shall take effect on the date of its execution by the County and expires upon final delivery, inspection, acceptance and payment unless terminated earlier in accordance with the Termination provisions herein.
- c) The CONSULTANT shall provide said services pursuant to this Work Order, its Attachments, and the cited Master Agreement (as amended, if applicable) which is incorporated herein by reference as if it had been set out in its entirety.
- d) Whenever the Work Order conflicts with the cited Master Agreement, the Master Agreement shall prevail.
- e) METHOD OF COMPENSATION - If the compensation is based on a:
 - (i) FIXED FEE BASIS, then the Work Order Amount becomes the Fixed Fee Amount and the CONSULTANT shall perform all work required by this Work Order for the Fixed Fee Amount. The Fixed Fee is an all-inclusive Firm Fixed Price binding the CONSULTANT to complete the work for the Fixed Fee Amount regardless of the costs of performance. In no event shall the CONSULTANT be paid more than the Fixed Fee Amount.
 - (ii) TIME BASIS WITH A NOT-TO-EXCEED AMOUNT, then the Work Order Amount becomes the Not-to-Exceed Amount and the CONSULTANT shall perform all the work required by this Work Order for a sum not exceeding the Not-to-Exceed Amount. In no event is the CONSULTANT authorized to incur expenses exceeding the not-to-exceed amount without the express written consent of the COUNTY. Such consent will normally be in the form of an amendment to this Work Order. The CONSULTANT's compensation shall be based on the actual work required by this Work Order and the Labor Hour Rates established in the Master Agreement.
 - (iii) TIME BASIS WITH A LIMITATION OF FUNDS AMOUNT, then the Work Order Amount becomes the Limitation of Funds amount and the CONSULTANT is not authorized to exceed the Limitation of Funds amount without prior written approval of the COUNTY. Such approval, if given by the COUNTY, shall indicate a new Limitation of Funds amount. The CONSULTANT shall advise the COUNTY whenever the CONSULTANT has incurred expenses on this Work Order that equals or exceeds eighty percent (80%) of the Limitation of Funds amount. The CONSULTANT's compensation shall be based on the actual work required by this Work Order and the Labor Hour Rates established in the Master Agreement.
- f) Payment to the CONSULTANT shall be made by the COUNTY in strict accordance with the payment terms of the referenced Master Agreement.
- g) It is expressly understood by the CONSULTANT that this Work Order, until executed by the COUNTY, does not authorize the performance of any services by the CONSULTANT and that the COUNTY, prior to its execution of the Work Order, reserves the right to authorize a party other than the CONSULTANT to perform the services called for under this Work Order; if it is determined that to do so is in the best interest of the COUNTY.
- h) The CONSULTANT shall sign the Work Order first and the COUNTY second. This Work Order becomes effective and binding upon execution by the COUNTY and not until then. A copy of this Work Order will be forwarded to the CONSULTANT upon execution by the COUNTY.

TECHNICAL MEMORANDUM
Lake Howell Road Stormwater Improvement Project (CIP#2091_03)

Initial Evaluation

The Keith and Schnars, P.A. Team (K&S) has evaluated the site conditions both in the field and from review of existing Howell Branch Road widening plans prepared by Beiswenger, Hoch and Associates, Inc. in 1993. K&S understands that the design and evaluation effort are threefold: (1) Hydrologic/hydraulic analysis of the existing storm water treatment pond for Howell Branch Road located on the north side of Howell Crossings Apartment complex to determine if staging in the pond contributes to flooding of the Howell Crossings complex parking lot, (2) Identify corrective measures for the storm water pond if staging in the pond can potentially cause flooding to the stated apartment complex and evaluate and provide construction documents for additional water quality treatment for the existing contributing drainage basin by expanding the existing pond to include property owned by Seminole County between the pond and Lake Howell Road, and, (3) Evaluate potential flood conditions for the swale section on the east side of Lake Howell Road north and south of Derbyshire Road and prepare construction documents for the remedy. The swale is a closed system.

Our team members met with Joe Howell, City of Casselberry Storm Water Engineer to discuss issues pertaining to the above planned project elements. In reference to Item number (3) above, it may be possible to connect the swale with an inlet structure and pipe across Lake Howell Road to an existing storm sewer manhole on the west side of Lake Howell Road. The storm sewer system provides drainage for a short section of swale on the south side of Derbyshire Road and outfalls to an existing pond to the north of the planned City of Casselberry Derbyshire Park (north of Derbyshire Road and west of Lake Howell Road).



In reference to Item number (2) above, the Florida Department of Environmental Protection (FDEP) has identified the Upper Reach of Howell Creek (above Lake Howell) and Lake Howell as Impaired Surface Waters under Chapter 62-303(d), F.A.C. Since Lake Howell and Upper Howell Creek are on the verified list for which FDEP will calculate Total Maximum Daily Loads (TMDL) starting in 2008 followed by development of a Basin Management Action Plan for identification of pollutant loading to be assimilated upstream of the water bodies, it is in the County's best interest to plan for water quality improvement measures within the watershed. The expansion of the storm water treatment pond north of Howell Crossings Apartment complex could provide the beneficial water quality treatment value sought by the County to meet the challenges coming with the provisions of the Impaired Surface Waters Rule.

Item numbers (1) and (2) above will require stormwater simulation of the existing and expanded wet pond. The 1993 Howell Branch Road Improvement plans include a drainage map that will aid in determining drainage areas. K&S will research Seminole County and FDOT records to locate the original plans and drainage design documentation for the 4-lane improvement and Seminole County files for design documentation for the proposed 6-lane improvement. If none of the original design documentation is available, K&S will determine hydrologic parameters for the pond simulation based on commonly accepted industry practices.

Approach to the Project

K&S will perform the necessary design and utility surveys, geotechnical investigations, and initial existing condition hydrologic and hydraulic evaluation of the Howell Branch Road storm water management facility for the Mean Annual, 10-year 24-hour and 25-year 24-hour storm events (AdICPR). A summary of results memorandum will be submitted to Seminole County to evaluate and coordinate with the owners of Howell Crossings Apartment complex. K&S will then prepare design concept plans for expanding the existing pond to the east within Seminole County property to provide additional attenuation and water quality treatment volume for the contributing drainage area and conduct storm water modeling of the design concepts for the three (3) events discussed above. We will perform parallel services to develop preliminary concepts for improving drainage and water quality treatment for the contributing drainage area on the east side of Lake Howell Road north and south of Derbyshire Road intersection. Following the completion of the concept plan development K&S will prepare preliminary cost estimates. A meeting will be scheduled with St. Johns River Water Management District (SJRWMD) to confirm the permit requirements for this project. Then, our team will evaluate recommendations and permitting needs in a field review with the Seminole County Project Manager. K&S will prepare 30% plans for approved alternatives and prepare a Technical Memorandum that will include a description of the design concept, a water quality comparison assessment, preliminary construction costs, design calculations and mapping, and minutes of field reviews and meetings with SJRWMD.

Following approval of the selected alternative, K&S will prepare the 90% and Final Construction Plans, Technical Special Provisions and Specifications not covered by FDOT Standard Specifications. Each phase will be submitted to Seminole County for approval along with updated cost estimates. Final Plans and Specifications will be submitted to Seminole County in electronic format for bid processing.

TECHNICAL MEMORANDUM
Lake Howell Road Stormwater Improvement Project (CIP#2091_03)

Alternative Improvements

The existing swale and roadway on the east side of Lake Howell Road north and south of the intersection with Derbyshire Road experiences flooding even during normal rainfall events due to lack of positive outfall. A potential solution would be to install an inlet structure in the swale with a pipe outfall under Lake Howell Road to one of two existing interconnected storm manholes on the west side of Lake Howell Road. One manhole is located at the intersection of Derbyshire Road and the other is located just to the north of the intersection. These manholes are connected together by a 15" RCP storm sewer and discharge north into the Forest Brook subdivision storm sewer outfall which ultimately drains to Newport Colony Apartments retention pond. Existing City of Casselberry water main and 6" gravity sanitary sewer lines run north to south on the west side of Lake Howell Road and lie between the curb and gutter and the referenced manholes. The invert of the storm manholes are a few feet above the invert of the sanitary sewer manholes and a couple of feet below the water main thus there is a reasonable likelihood of installing a pipe connection from the east side of Lake Howell Road into one of the storm manholes without adversely impacting the sanitary sewer or water main. K&S will evaluate the opportunity for storm water treatment in the swale on the east side of Lake Howell Road.

K&S will conduct the hydraulic analysis of the Howell Branch Road Pond located behind the Howell Crossings Apartments based on the currently contributing drainage area and pond configuration to determine if staging in the pond adversely impacts the driveway or foundations of the apartment complex. It appears from our field review the parking areas drain to the west and north to the northwest corner of the parking lot. During heavy or normal storm events, it appears that the flooding experienced in the parking area may result from the lack of adequate storm water collection system in the apartment complex's parking and driveway areas. Once the pond hydraulic analysis is completed we will prepare and review with Seminole County staff a memorandum summarizing the results of our investigation. Upon acceptance of our existing condition modeling results, we will prepare the requested alternative concepts and hydraulic analyses for the pond expansion. Our pond expansion alternative plans will focus on providing additional storm water treatment and

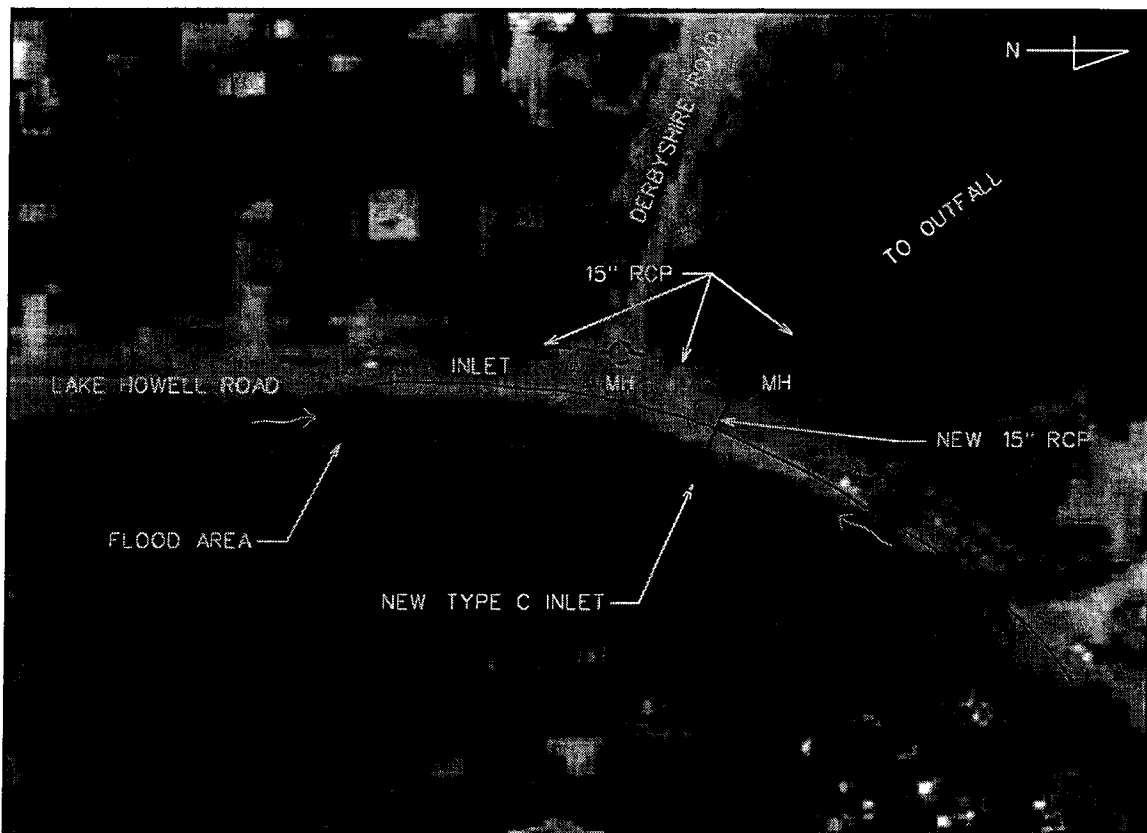


attenuation volume for the existing contributing drainage basin. This may result in adjustment to the existing control structure.

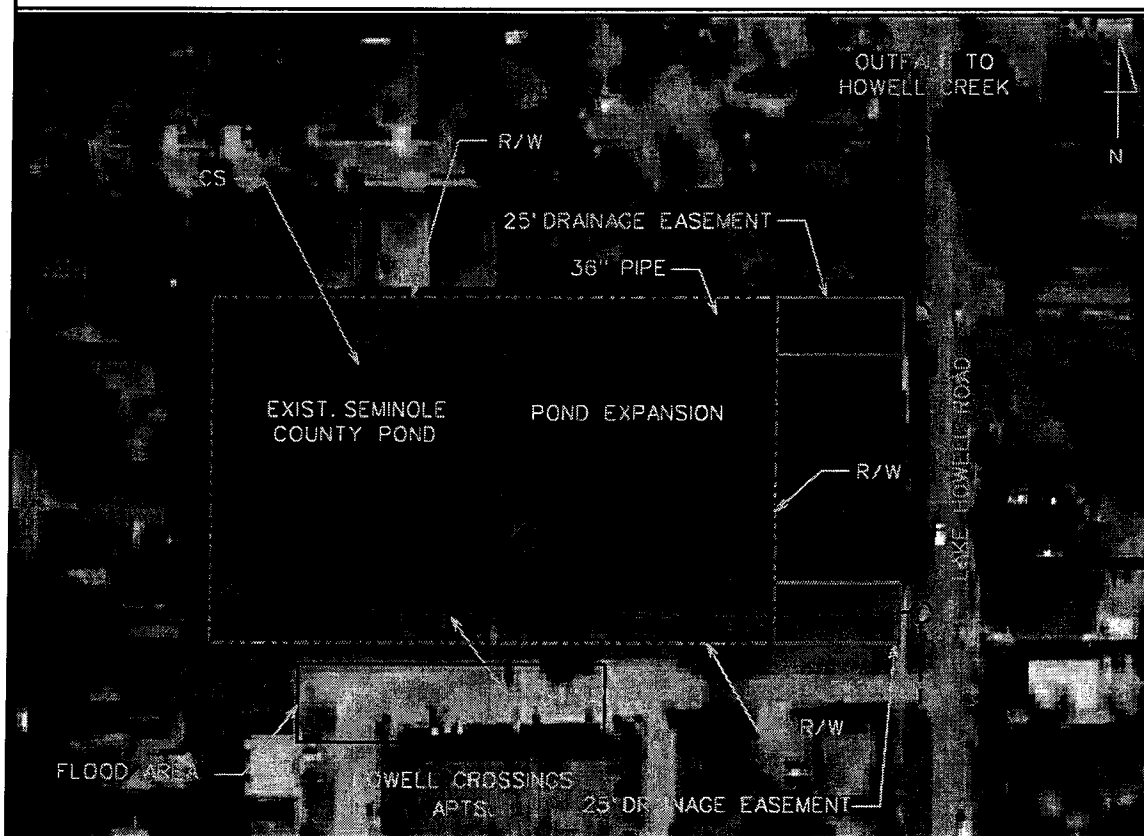
Final design efforts will include expansion of the pond, retrofit of the existing control structure (if needed), reshaping side slopes and installation of erosion control countermeasures adjacent to the northwest corner of the Howell Crossings parking area to control potentially erosive overflow from the parking area.

K&S reviewed the permit requirements with Bill Carlie, Compliance Manager at SJRWMD. Bill indicated that a Letter of Exemption can be filed for both improvements so long as there are no additional hydraulic connections made to the Howell Branch Road Pond from areas not already served by the pond.





LAKE HOWELL ROAD AT DERBYSHIRE ROAD
EAST SIDE DRAINAGE IMPROVEMENTS



HOWELL BRANCH ROAD POND
EXIST. CONDITION STUDY AND EXPANSION

[illegible]

James M. Dunn, II, P.S.M.
Larry R. Efird, P.S.M.
Brian R. Garvey, P.E.
Gary B. Krick, P.S.M.
Myron F. Lucas, P.S.M.
Thomas K. Mead, P.S.M.
Timothy Mosby, P.S.M.



James L. Petersen, P.S.M.
Larry W. Prescott, P.S.M.
William C. Rowe, P.S.M.
Marcia E. Russell, P.S.M.
George E. Snyder, P.S.M.
Roger Lonsway, P.S.M. (Retired)

Land Surveying & Mapping Services • Sub-Surface Utility Designation & Location Services • GPS Asset Inventories • Geographic Information Systems

May 19, 2005

VIA E-MAIL: dgraham@keithandschnars.com

Mr. Donald Graham, P.E.
Keith and Schnars, P.A..
385 Centerpoint Circle, Suite 1303
Altamonte Springs, Florida 32714

RE: Request for Proposal - Lake Howell Road

Dear Mr. Graham,

We are pleased to submit our Proposal for surveying services on the above referenced project.

SCOPE OF WORK:

Provide Surveying Services in accordance with Chapter 61G17-6 F.A.C. to include the following:

1. Establish horizontal control network based on previous surveys performed by SSMC.
2. Establish vertical control network based on Seminole County NGVD 1929 Vertical Control Points.
3. Locate all utilities as evidenced by above ground features.
4. Establish the position of right-of-way lines based on existing recovered monumentation, record plat geometry and coordination with the Seminole County R/W staff.
5. Locate all improvements and obtain spot elevations with break line delineation sufficient for the creation of a digital terrain model.
6. Topographic coverage will include the following items:
 - a) Stormwater retention area and vacant County owned lands north of the former "Red Lion Apartments" extending easterly to the east R/W line of Lake Howell Road.
 - b) Track outfall along Lake Howell Road from the north line of the former "Red Lion Apartments" northerly to Howell Creek.
 - c) Lake Howell Road from the east edge of pavement to the east R/W line from 300 feet south of Derbyshire Road north to the 7-11 Driveway and including the full intersection of Derbyshire Road and Lake Howell Road.

Page 2
Mr. Donald Graham, P.E.
Lake Howell Road
May 19, 2005

7. Locate Jurisdictional Wetlands as flagged by environmental specialist.
8. Locate soil borings as necessary to support geotechnical effort.

The final product will be four (4) certified prints, and an electronic file on disk for your use.

Our fee for the above referenced work is outlined on the attached fee schedule. A completion schedule will be provided as project commencement nears. Payment is expected within thirty (30) days of invoice.

We look forward to the opportunity to work with you on this project.

Sincerely,

James L. Petersen, P.S.M.
Vice President/Project Manager
JLP:jpl

If the above scope, period of service and method of compensation meets with your approval, please execute below and fax to Southeastern Surveying & Mapping Corp. as notice to proceed along with the notice of commencement.

ACCEPTED BY:

Authorized Signature

Printed Name

Date

FEE QUOTATION PROPOSAL

Date: May 19, 2005

Project Name: Lake Howell Road

Contract: Keith and Schnars / Seminole County

Name of Firm: Southeastern Surveying & Mapping Corporation

ACTIVITY	PLS			SEN TECH			DRAFTSPERSON			2 MAN CREW			3 MAN CREW		
	Man Hrs	Hrly Rate	Fee	Man Hrs	Hrly Rate	Fee	Man Hrs	Hrly Rate	Fee	Man Hrs	Hrly Rate	Fee	Man Hrs	Hrly Rate	Fee
Horizontal Control	0.5	98.25	49.13	1	91.29	91.29		49.10	0.00	8	90.94	727.52		118.44	0.00
R/W Location	1	98.25	98.25	1	91.29	91.29	1	49.10	49.10	2	90.94	181.88		118.44	0.00
Vertical Control	0.5	98.25	49.13	1	91.29	91.29	1	49.10	49.10	4	90.94	363.76		118.44	0.00
Topographic Survey		98.25	0.00	6	91.29	547.74	16	49.10	785.60	16	90.94	1,455.04		118.44	0.00
Wetlands Locations		98.25	0.00		91.29	0.00	2	49.10	98.20	4	90.94	363.76		118.44	0.00
Geotechnical Support		98.25	0.00		91.29	0.00	1	49.10	49.10	2	90.94	181.88		118.44	0.00
		98.25	0.00		91.29	0.00		49.10	0.00		90.94	0.00		118.44	0.00
		98.25	0.00		91.29	0.00		49.10	0.00		90.94	0.00		118.44	0.00
		98.25	0.00		91.29	0.00		49.10	0.00		90.94	0.00		118.44	0.00

LUMP SUM FEE BREAKDOWN

Professional Surveyor

\$ 196.51

Senior Technician

\$ 821.61

Draftsperson

\$ 1,031.10

Two-Man Crew

\$ 3,273.84

Three-Man Crew

\$ 0.00

LUMP SUM FEE TOTAL

\$ 5,323.06

LAKE HOWELL ROAD STORMWATER IMPROVEMENT PROJECT (CIP No. 2091_03)

Proposal for Geotechnical Services: Ardaman & Associates, Inc.

May 19, 2005

Don;

As requested I have worked up estimated budgets for the referenced project.

From our discussion and a review of the RFP, I understand that the two major elements of the project will be to expand than exiting wet retention pond adjacent to the nearby apartment complex and to deal with flooding near the north end of the project.

I have based my estimate on the basis that we will provide the following;

1. Descriptions of the soil conditions obtained from the area adjacent to the retention pond.
2. Recommendations for the suitability of the soil excavated from the pond expansion to be used as fill elsewhere
3. Description of the soils within the flood area and in selected areas along the length of the project

To accomplish our scope we will perform the following;

1. Mobilize Rig
2. Conduct 3-25 foot deep SPT borings adjacent to the existing pond
3. Conduct 3-10 foot deep auger borings in the flooding area
4. Conduct 3-10 foot auger borings elsewhere along the alignment
5. Perform laboratory index tests
6. Provide engineering analysis, recommendations and a report.

The budget for this scope should be set at **\$2,800.00** .

Mark L. Mongeau, P.E.
Ardaman & Associates, Inc.
8008 S. Orange Ave.
Orlando, FL 32809
407-855-3860 (voice)
407-859-8121 (fax)
mmongeau@ardaman.com
ardaman.com (website)

PS-5165-04
w/o #19



Seminole County Stormwater Division
Lake Howell Road Stormwater Improvement Project

CIP # 2091_03

Evaluation Form

	WBQ	PEC	INWOOD	KEITH	METRIC	HDR
Total Manhours (adequate manhours for job, not cost)	N.A.	N.A.	N.A.	4	3	N.A.
Completeness of Proposal	N.A.	N.A.	N.A.	5	3	N.A.
Technical Issues & Approach	N.A.	N.A.	N.A.	4	3	N.A.
Total Score				13	9	
Ranking				#1	#2	

* Individual categories to be scored 1 to 5, with 5 being the best score per category.

Evaluator: Roland Raymundo - R2/K/hnt

Date: 05.24.05

Comments: K&S has a complete understanding of the
issues in this project. They have shown
a better approach to solving these issues.
I recommend Keith and Schnars for this
project.

PS-5165-04
w/o #19



Seminole County Stormwater Division
Lake Howell Road Stormwater Improvement Project

CIP # 2091_03

Evaluation Form

	WBQ	PEC	INWOOD	KEITH	METRIC	HDR
Total Manhours (adequate manhours for job, not cost)	N.A.	N.A.	N.A.	4	5	N.A.
Completeness of Proposal	N.A.	N.A.	N.A.	5	4	N.A.
Technical Issues & Approach	N.A.	N.A.	N.A.	5	3	N.A.
Total Score						
Ranking				14	12	

* Individual categories to be scored 1 to 5, with 5 being the best score per category.

Evaluator: [Signature]

Date: 5/25/05

Comments: K&S knew about the flooding problems
w/ the apartment complex, has looked at
existing situation at Reubenshine and
has contacted S&S

PS-5165-04
w/o #19



Seminole County Stormwater Division
Lake Howell Road Stormwater Improvement Project

CIP # 2091_03

Evaluation Form

	WBQ	PEC	INWOOD	KEITH	METRIC	HDR
Total Manhours (adequate manhours for job, not cost)	N.A.	N.A.	N.A.	4	5	N.A.
Completeness of Proposal	N.A.	N.A.	N.A.	5	4	N.A.
Technical Issues & Approach	N.A.	N.A.	N.A.	5	3	N.A.
Total Score				14	12	
Ranking				1	2	

* Individual categories to be scored 1 to 5, with 5 being the best score per category.

Evaluator: 

Date: 5/24/05

Comments:

K&S PROVIDED A MUCH MORE DETAILED
LOOK AT THE PROJECT AREA AND ASSOCIATED
ISSUES, INCLUDING POTENTIAL SOLUTIONS.
ALTHOUGH K&S HAD MORE MANHOURS FOR
THE PROJECT, THE PROPOSED WORK IT
IS MORE ALIGNED WITH OUR NEEDS.

